The health of the people is really the foundation upon which all their happiness and all their powers as a state depend.

—Benjamin Disraeli, Earl of Beaconsfield
(Speech, July 23, 1877)

Health Education

Health Education

DEFINITION

Comprehensive School Health Education (CSHE) includes curriculum, instruction and assessment that is sequential from kindergarten through high school and that meets the health education standards outlined in the Maine *Learning Results*. CSHE addresses physical, mental, emotional, and social aspects of health, and provides knowledge and skills that promote and enhance lifelong healthy behaviors. CSHE includes ten mandated content areas:

- community health
- consumer health
- environmental health
- family life education
- growth and development
- personal health, including mental and emotional health
- nutritional health
- prevention and control of disease and disorders
- safety and accident prevention
- substance use and abuse prevention

The framework for the CSHE Guidelines is as follows:

Comprehensive School Health Education:
Health education as a core academic subject.
Coordination of curriculum, instruction and assessment.
Support system for health education.
Health education as part of a coordinated school health program.

Health Education Curriculum:
Comprehensive and sequential.
Aligned to State Health Education Standards.
Criteria for effectiveness.
Essential knowledge and skills.
Curriculum development process.

Health Education Instruction:
Adequate time, opportunity and resources.
Culturally and developmentally appropriate instruction and classroom materials.
Effective and varied instructional practices.
Taught as a distinct course of study.
Individual health topics are part of a comprehensive school health education program.

Health Education Student Assessment and Program Evaluation:
Assessment of student achievement utilizing a variety of strategies.
Reporting student achievement.
Evaluation of health education program.
State assessment.

Health Education

Teacher Preparation, Certification and Continuing Education for Teachers:

Elementary school.
Middle school.
High school.
Continuing professional development

RATIONALE

CSHE motivates and enables students to maintain and improve their health, prevent disease, and reduce health-related risk behaviors. As indicated in the *State of Maine Learning Results* (1997):

> Health education gives students the knowledge and skills to thrive physically, mentally, emotionally, and socially. This knowledge helps students meet the challenges of growing up. It helps students to recognize the causes of ill health and to understand the benefits of prevention, good hygiene, and appropriate medical care. Through health education, students become aware of the dimensions of good health: physical soundness and vigor; mental alertness and ability to concentrate; expressing emotions in a healthy way; resiliency; and positive relations with family and peers. Health education also includes a set of skills to help students be better consumers of information, to manage stress and conflict, and to make better decisions in the face of conflicting messages, thus assisting them to live healthier lives (p. 23).

Health education is a core academic subject requiring appropriate resources and support.

GUIDELINES

1. Require health education as a core academic subject.
2. Ensure that health education instruction delivered to students transmits essential health knowledge and skills as specified in the health education curriculum, and that assessment of student performance is designed to determine whether students are mastering those essential skills and knowledge.
3. Adopt appropriate policies and provide essential resources and supports to effectively implement a high-quality health education curriculum for all students.
4. Deliver comprehensive health education within the context of a coordinated school health program.
5. Adopt a sequential, comprehensive pre-K through high school health education curriculum.
6. Align local health education curriculum with Maine health education standards.
7. Design health education curriculum based on recognized research-based and theory-driven criteria for effectiveness, and on identified needs of students.
8. Ensure that the health education curriculum includes essential health concepts and skills.
9. Follow a sequential process for curriculum development, review, and adoption.
10. Provide adequate instructional time, opportunity, and resources to assure student achievement of the health education standards outlined in the Maine *Learning Results*.

11. Provide health education instruction and classroom materials that are culturally and developmentally appropriate.
12. Utilize varied and effective instructional strategies that allow students to learn essential health concepts, as well as to observe, practice, and apply health skills.
13. Teach health education as a separate, unique subject, with additional reinforcement across the other academic areas.
14. Provide instruction on individual health topics within comprehensive school health education.
15. Assess student achievement in health education by utilizing a variety of strategies.
16. Include health education in the local assessment system.
17. Evaluate health education programs by systematically conducting a process evaluation to determine the extent to which teachers are delivering health education, and utilize state and local assessment scores to determine program effectiveness.
18. Participate in statewide assessments of student health knowledge and skills.
19. Employ elementary-level teachers who have completed one or more academic courses addressing the content and methods unique to health education at the elementary level as a part of their pre-service training.
20. Employ middle-school teachers with primary responsibility for health education who have academic preparation addressing the content and methods unique to health education at the middle-school level, and who meet state certification requirements for health education.
21. Employ high-school teachers who have completed a formal major in health education from an accredited program and hold the appropriate state certification to teach health education.
22. Offer opportunities for continuing professional development activities that address content, methods, and contemporary issues unique to health education.

GUIDELINE 1: Require health education as a core academic subject.

RATIONALE

Maine's health education standards (Maine Department of Education, 2001, Chapter 127, "Instructional Requirements and Graduation Standards") require that health education be taught every year from kindergarten through eighth grade. Chapter 127 also requires students to complete a half-credit health education course for high school graduation. Several national surveys have found that:

- Parents, students, and school administrators believe that health education should have a prominent place in the overall school curriculum.
- Adults in the U.S. consider learning about all aspects of health to be an essential aspect of the core school curriculum.

Health Education

In addition, national studies have shown that many school constituencies strongly view health education as essential to the preparation of well-educated persons. Health status and educational achievement are linked: Healthy students learn better than unhealthy ones, and well-educated individuals are healthier on average than those with less education.

INDICATORS:

A. Health education is taught and assessed at every grade, K-8.
B. A minimum of one-half credit in health education is required for high school graduation.

GUIDELINE 2: Ensure that health education instruction delivered to students transmits essential health knowledge and skills as specified in the health education curriculum, and that assessment of student performance is designed to determine whether students are mastering those essential skills and knowledge.

RATIONALE

In order for students to acquire essential health knowledge and skills as identified in the health education written curriculum, actual classroom instruction must be consistent with the curriculum. Additionally, student assessment must be directly linked to curriculum and instruction. Student assessment strategies must be carefully designed to measure whether or not students have attained the objectives specified in the curriculum. Alignment of curriculum, instruction, and assessment is sound educational practice, regardless of the subject in question.

INDICATOR:

A. Health education curriculum, classroom instruction and student assessment are in alignment.

GUIDELINE 3: Adopt appropriate policies and provide essential resources and supports to effectively implement a high-quality health education curriculum for all students.

RATIONALE

Health education is an essential part of a well-balanced pre-K-12 curriculum. Adequate fiscal allocations should be provided, on the same level as other core curriculum subjects, for appropriate time, space, instructional materials and appropriate teaching and support staff. An

effective support system for delivering the planned health education curriculum allows for students with varying needs and abilities to achieve instructional objectives that lead to attainment of health education standards.

INDICATORS:

A. Health education is supported by high administrative priority, health-enhancing school policies, and access to curriculum and instructional materials.
B. Health education resources include sufficient funding, adequate instructional time, and well-qualified staff with access to ongoing professional development.

GUIDELINE 4: Deliver comprehensive health education within the context of a coordinated school health program.

RATIONALE

Health instruction received by students enhances and is enhanced by all other coordinated school health program components. A dynamic interaction between health education and the other components of the coordinated school health program contributes to and reinforces students' health and academic goals, and is critical for maximum effectiveness. Many schools offer and coordinate at least some of the components of a coordinated school health program. As the number and coordination of these components increase, so does the potential for impact on instruction and on the health status of students. Schools are encouraged to have a health coordinator and to develop school health teams of administrators, staff, family and community members. These teams contribute to the successful implementation of each program component, and to the dynamic interaction of health education with all the other components.

Examples of coordination include:

- The health education teacher or health coordinator serves as a resource for other staff, increasing the likelihood that students will seek needed counseling, physical or behavioral health services, or social services, or become involved in community programs.
- Counselors facilitate peer education activities, enhancing health education instruction in classrooms.
- Physical education and health education teachers coordinate learning activities that complement and reinforce one another.
- Participating in school wellness programs makes staff more likely to advocate for comprehensive health education and to reinforce health messages with students.

Health Education

INDICATORS:

A. The school administrative unit has a school health coordinator.
B. The school administrative unit has a system for coordinating the components of a school program, including a school health leadership team with a health education representative.

GUIDELINE 5: Adopt a sequential, comprehensive pre-K through high school health education curriculum.

RATIONALE

CSHE includes ten mandated content areas:

- community health
- consumer health
- environmental health
- family life education
- growth and development
- personal health, including mental and emotional health
- nutrition health
- prevention and control of disease and disorders
- safety and accident prevention
- substance use and abuse prevention.

Research has shown that the comprehensiveness of a health education program is one factor in determining its effectiveness. A 1989 Harris survey of students in grades 3 through 12 found that health knowledge, attitudes, and behaviors improved with increasing numbers of years of health education instruction. The *School Health Education Evaluation* (Connell, et al., 1985) found that students receiving multi-year, multi-topic health instruction had higher knowledge than students with no health education instruction.

INDICATOR:

A. Health education curricula include all ten mandated health education content areas, delivered in a sequential manner.

GUIDELINE 6: Align local health education curriculum with Maine health education standards.

RATIONALE

The Maine health education standards, outlined in the Maine *Learning Results,* provide school districts with the framework to develop local health education curriculum.

INDICATOR:

A. The health education curriculum is aligned with the Maine health education standards.

GUIDELINE 7: Design health education curriculum based on recognized research-based and theory-driven criteria for effectiveness, and on identified needs of students.

RATIONALE

The elements of effective health education include:

- Basic, accurate information that is developmentally appropriate;
- Use of interactive, experiential activities that actively engage students;
- Opportunities for students to model and practice relevant social skills;
- Instruction in the social and media influences on behaviors;
- Strengthening of individual values and group norms that support health-enhancing behaviors; and
- Sufficient time to allow students to gain the needed knowledge and skills.

When developing health education curriculum, the curriculum committee should seriously consider programs that have undergone evaluation using an appropriate control or comparison group and that have evidence that they effectively address the intended behaviors. The committee may adapt such programs to the needs of the students while maintaining fidelity to the program. Before reviewing specific programs, the committee should establish criteria for making their recommendations–for example, the relative weight of scientific evidence and values.

INDICATOR:

A. The health education curriculum utilizes:

1. Research-based programs.
2. Theory-driven criteria for effectiveness.
3. Needs of students.

GUIDELINE 8: Ensure that the health education curriculum includes essential health concepts and skills.

RATIONALE

Strong, broad-based consensus exists among school health educators as to the essential concepts and skills students should learn to be healthy for a lifetime. These essential concepts and skills are defined by the Maine Health Education Standards, Chapter 127; by National Health Education Standards; and by federal health guidance documents such as the CDC/DASH School Health Guidelines.

INDICATOR:

A. Health education curriculum includes essential health concepts and skills.

GUIDELINE 9: Follow a sequential process for curriculum development, review, and adoption.

RATIONALE

Following a sequential curriculum development process that involves multiple stakeholders will result in approval of a health education curriculum that meets student needs and is consistent with community norms. Employing this process also generates widespread buy-in and ownership of the curriculum.

Although students of a given age share many characteristics, unique aspects of a community or of individual students should be documented and taken into account when planning a health education curriculum. A group of people who know the community and are familiar with the students should gather and examine relevant information about students at the school to determine priorities for health instruction. This group can include teachers, administrators, other school health staff, community and public health professionals, medical professionals, clergy, parents, and students themselves.

Needs assessment can include student surveys, information from focus groups of students and/or parents, and data from health care providers or professionals about health concerns that are seen on a regular basis. The information should not point out health problems of specific students, but rather identify trends and students' risks relative to others their age.

INDICATORS:

A.. The curriculum development process includes:

1. A curriculum development committee with representation from stakeholder groups.
2. A needs assessment.
3. A review of policies, literature and existing resources.
4. Written curriculum.
5. Curriculum review.
6. Pilot testing of the curriculum.
7. Review of input from teachers and revision of the curriculum as needed.
8. School board approval of the curriculum.
9. School staff, students, parents and community members are involved in the curriculum development and assessment processes.

GUIDELINE 10: Provide adequate instructional time, opportunity, and resources to ensure student achievement of the health education standards outlined in the Maine *Learning Results*.

RATIONALE

Studies show that adequate instructional time, resources and opportunities to learn are important for mastery of essential health knowledge and skills. Gains in students' health knowledge, attitudes and skills are most apparent when students receive at least 50 hours of health education instruction in grades K-8 and a full year of health education instruction at the high school level. Adequate instructional time is necessary for students to meet the health education standards outlined in the Maine *Learning Results.*

INDICATORS:

A. At least 50 hours are allocated in every grade, K-8, for health education instruction.
B. High school students receive a full year of separate and specific health education instruction.

C. In addition, high school students study health education each year through separate or integrated study.
D. Adequate and current resources are available.
E. Opportunities are provided for active participation and learning.

GUIDELINE 11: Provide health education instruction and classroom materials that are culturally and developmentally appropriate.

RATIONALE

Effective health education instruction and classroom materials must be geared to the developmental needs and characteristics of students. Learning is enhanced when the physical, mental, emotional and social status of students is considered.

INDICATOR:

Health education instruction and classroom materials are culturally sensitive and developmentally appropriate.

GUIDELINE 12: Utilize varied and effective instructional strategies that allow students to learn essential health concepts, as well as to observe, practice, and apply health skills.

RATIONALE

Students have a variety of learning styles; thus teachers should employ a variety of instructional methods. Students who have the opportunity to practice health-enhancing skills are more likely to utilize these skills in real-life situations than are those who receive only academic instruction. Students must learn health skills related to decision-making, communication, problem-solving, and risk reduction in order to be able to choose healthy behaviors and to sustain those choices outside of the classroom.

INDICATOR:

A. Teachers demonstrate health skills, and provide students opportunities to practice, apply and master skills in situations that simulate circumstances students will face outside the classroom.

GUIDELINE 13: Teach health education as a separate, unique subject, with additional reinforcement across the other academic areas.

RATIONALE

Studies indicate that it is optimal to teach health education as a separate course of study at every grade. Health education covers greater depth and is given more instructional time in the school curriculum when it is taught as a separate course of study. Offering comprehensive health education as a separate course of study increases the likelihood of it becoming a regular part of the instructional program at each grade level. Advances in knowledge about how children and adolescents learn support the idea of providing additional connections through thematic integrations of health education within and across other content areas.

INDICATORS:

A. Health education is taught and assessed as a separate subject.
B. Reinforcement of health education across the other academic areas strengthens and enriches understanding

GUIDELINE 14: Provide instruction on individual health topics within comprehensive school health education.

RATIONALE

Comprehensive health education for pre-K-high school students has been found to be more effective in changing health behaviors than occasional programs on single health topics.

Health Education

INDICATOR:

A. Categorical programs are incorporated into comprehensive health education, rather than being offered as stand-alone programs.

GUIDELINE 15: Assess student achievement in health education by utilizing a variety of strategies.

RATIONALE

Health education helps students to acquire knowledge, and to develop and apply higher-order cognitive skills. Authentic assessment in any content area, including health education, takes the form of student products, performances and portfolios, and requires a clear link to predetermined standards/indicators. Use of multiple assessment strategies allows all students to demonstrate mastery of essential health knowledge and skills in ways that are meaningful to both teacher and student.

INDICATOR:

A. Teachers consider the varying levels of student skills, abilities, and learning styles for assessment when selecting appropriate assessment strategies.

GUIDELINE 16: Include health education in the local assessment system.

RATIONALE

Health education is important to the well-rounded education of the whole child. The Maine *Learning Results* designates health education as one of the academic areas that must be taught and assessed in all public schools, regardless of resources.

In 2001, the Maine Legislature enacted Title 20-A (MRSA Chapter 222), which requires that by the end of the 2003-2004 school year the locally established assessment system must be fully implemented as the measure of progress for health and physical education and other areas. By 2007-2008, students must achieve the standards described in the *Learning Results* in the areas of English language arts, health and physical education, mathematics, science and technology, and social studies in order to graduate from high school.

INDICATORS:

A. Student achievement in health education is reported in a manner consistent with all other core academic subjects, as required in the Maine *Learning Results*.
B. Health education grades are included in overall grade point averages at the high school level
C. Health education is included within the local assessment design process.

GUIDELINE 17: Evaluate health education programs by systematically conducting a process evaluation to determine the extent to which teachers are delivering health education, and utilize state and local assessment scores to determine program effectiveness.

RATIONALE

Process evaluation of health education should be routinely conducted to determine that the instruction delivered to students is consistent with the planned curriculum, and that the curriculum is aligned to the Maine health education standards. If inconsistencies are found, actions should be taken to identify and rectify barriers to curriculum implementation (e.g., unavailability of resources, lack of time, inadequate teacher preparation, etc.).

Student assessment may demonstrate that students have not achieved specified learning objectives or attained health education standards. One reason for this lack of achievement may be that the health education instruction the students received was not consistent with the learning outcomes specified in the written curriculum. The only way to determine if curriculum implementation is a factor in low student achievement is to conduct routine process evaluation.

The state and local assessment systems provide valuable data on student achievement of the health education standards, and is useful in determining program strengths and weaknesses.

INDICATOR:

A. Evaluation of the health education program occurs on a regular basis, with opportunity to adjust the program as necessary.

Health Education

GUIDELINE 18: Participate in statewide assessments of student health knowledge and skills.

RATIONALE

In addition to established standards in health education, state-level assessment establishes benchmarks and indicators to monitor progress on program effectiveness and student achievement. This assessment can assist policy makers in making decisions about use of resources, the effectiveness and efficiency of schools, and support of local actions.

State, district and school-level data can be used by local education agencies in their local planning efforts.

INDICATORS:

A. Health education is assessed using the Maine Educational Assessment in grades 4, 8, and 11, with full participation by the school.
B. The school participates in the Maine Youth Risk Behavior Survey and the Youth Tobacco Survey, as appropriate.

GUIDELINE 19: Employ elementary-level teachers who have completed one or more academic courses addressing the content and methods unique to health education at the elementary level as a part of their pre-service training.

RATIONALE

Through national surveys, lack of teacher training has been identified as one of the most significant barriers to effective implementation of school health education at the elementary level. In order to be knowledgeable and comfortable with the health education curriculum, elementary teachers should be adequately prepared through appropriate course work. In order to be endorsed in Maine, elementary teachers are required to have a minimum of 12 semester hours to include all of the following: mathematics, reading, science/health, and social studies. Principals and school districts should seek to hire elementary educators who are prepared to teach health education.

Elementary classroom teachers help lay the foundation for good health behaviors and practices in children. Elementary teachers that have a minor or major emphasis in health education in their pre-service education can provide expertise to other teachers in their grade and/or school.

INDICATOR:

A. The school hires elementary teachers who are prepared to teach health education by completing at least one methods and materials course in health education at the elementary level.

GUIDELINE 20: Employ middle-school teachers with primary responsibility for health education who have academic preparation addressing the content and methods unique to health education at the middle-school level, and who meet state certification requirements for health education.

RATIONALE

Due to the complex and dynamic nature of health education and the unique developmental issues of the middle-level child, it is preferable for middle-school health teachers to have a major in health education. Individuals providing health education instruction at the middle-school or junior high-school level should have completed a formal major in health education from an accredited program, and hold the appropriate state certification to teach health education.

INDICATOR:

A. Middle-school or junior high-school health education teachers hold the proper endorsement for teaching health education in Maine.

GUIDELINE 21: Employ high-school teachers who have completed a formal major in health education from an accredited program and hold the appropriate state certification to teach health education.

RATIONALE

Highly sophisticated knowledge and skills are required to educate today's high-school students about health. The current health problems and emerging health trends require schools to employ teachers who can adequately prepare high-school graduates to make complex health-related decisions.

Health Education

The expectation of teachers at the high-school level is that they will be content specialists in their subject area. State certification, which is required to teach high-school health education, ensures that these teachers have met requirements that validate their knowledge and skills.

INDICATOR:

A. High-school health education teachers are certified to teach health education in Maine.

GUIDELINE 22: Offer opportunities for continuing professional development activities that address content, methods, and contemporary issues unique to health instruction.

RATIONALE

Teachers who regularly participate in professional development activities are more likely to be effective health educators than those who do not. Continuing education is essential for teachers who provide health education instruction. It is important to assess and address teacher needs, especially for elementary teachers who may have had little pre-service training in the area of health education.

Health education teachers should participate in a variety of health-related professional development activities; join relevant local, state, and national professional organizations; and engage in activities such as study groups, action research, and in-service and mentoring programs. Health education specialists are required to participate in relevant continuing education to maintain their teaching certificates.

INDICATORS:

A. Teachers regularly participate in continuing education to meet their needs in order to feel comfortable and knowledgeable regarding health education topics and industrial practices.
B. Health education specialists maintain their health education certificates.

MAINE RESOURCES AND CONTACTS

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